



Factors influencing sessions' and speakers' scores at EADV congresses

An analysis of score data to improve quality

Background and aims

In the face of ever-increasing and evolving medical knowledge, one of the major deep-rooted requirements has undoubtedly become the provision of continuing medical education and continuing professional development (CME-CPD) programmes. So far, few studies have examined the roles of various factors in the field of CME-CPD, and they were limited to a descriptive analysis or simple multiple comparison of the data.¹⁻⁴

A massive amount of data related to the evaluation of sessions and speakers has been collected during the EADV congresses over the years. This information source has not been systematically evaluated. Therefore, we carried out a retrospective analysis of the EADV CME-CPD data in order to identify factors that positively or negatively affect sessions' and speakers' scoring.

Methodology

Before starting the study, the EADV staff was asked to provide all the available data on the congresses conducted during the last decade, including: type of session, topic covered, number of speakers and participants per session, congress year, sessions' and speakers' scoring, the latter derived as the average of the participants' evaluation forms in a scale between 0-100.

The sessions' scoring consisted of four elements (relevance, impact, educational power and organisation), while the speakers' scoring comprised two factors (delivery ability and contents). For

analytical purposes, the main outcome was the average score derived by combining together the single sub-items.

Two predictive models for session and speaker scoring were built based on multivariate linear regression. All variables with at least 5 cases and with a p -value < 0.20 in MANOVA analysis were included in a sequential forward feature selection procedure with 2x5 fold cross-validation.⁵ This procedure ensured good generalisability of results. The effect of identified factors was expressed as mean score changes, along with their 95% confidence intervals (CI).

Results

Data collected in seven EADV congresses, from 2009 to 2015, were included in our study. Overall, 4964 speakers and 1022 sessions were evaluated. The average number of participants per single session was 5.0 ± 2.4 (mean \pm SD), with an increasing trend from 31.3 ± 24.3 in 2009 to 82.4 ± 52.7 in 2015.

In the multivariate analysis, variables that were more positively associated with a session's total score (based on an absolute change of at least 4 points) were, for the kind of topic, dermoscopy, neutrophilic diseases and hidradenitis suppurativa. Conversely, factors that were negatively associated with a session's total score were, for the type of session, short thematic presentations and free communications (Figure 1).

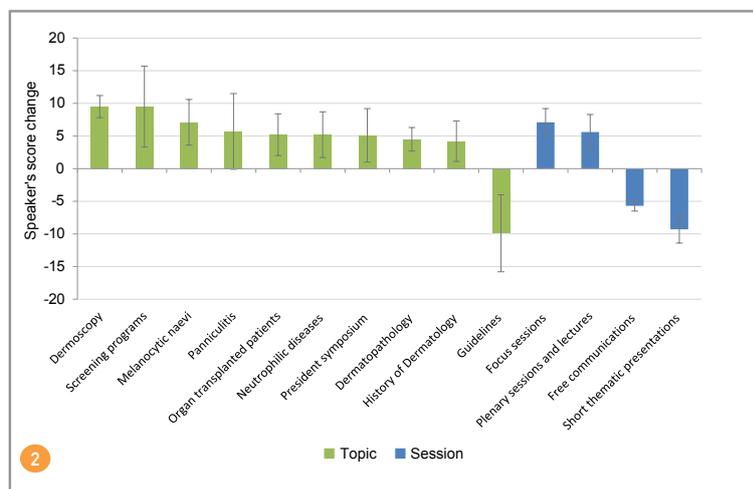
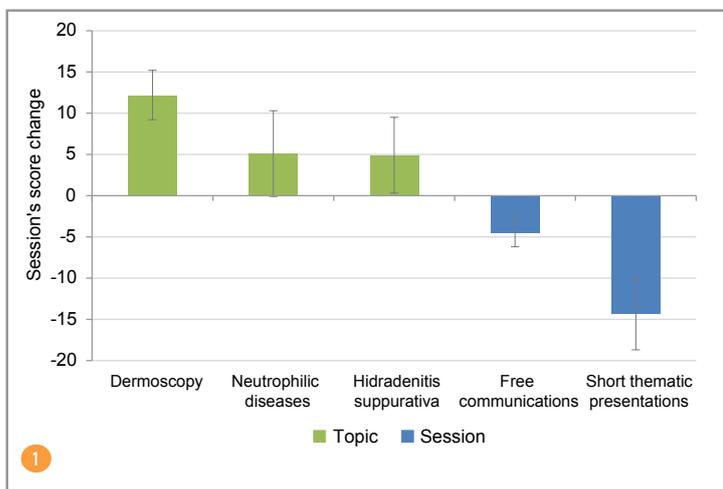
Factors that were more positively associated with total speaker's score were,

for the type of session, focus sessions and plenary sessions and lectures. For the kind of topic, they were, dermoscopy, screening programmes, melanocytic naevi, panniculitis, organ-transplanted patients, neutrophilic diseases, President's Symposium, dermatopathology and history of dermatology. Conversely, factors that were more negatively associated with a speaker's total score were, for the type of session, short thematic presentations and free communications, while for the type of topic covered, guidelines (Figure 2).

The year of the congress was included in the model and it was positively associated with both sessions' and speakers' scores, with an increase of 0.5 points (95% CI: 0.3, 0.7) and 0.3 points (95% CI: 0.2, 0.5) per year respectively. The number of speakers per single session was also included, and it was negatively associated with.

Conclusions and way forward

In conclusion, our analysis showed that some areas, such as short thematic presentations and free communications likely to include unfocused presentations, are of reduced interest to the general audience of the congress. On the contrary, focused and specialised topics, such as dermoscopy and skin cancer screening programmes are more prone to capture attention, satisfying the interest of a large proportion of congress participants. Quite surprisingly, relevant and focused topics such as guidelines and registries, as well as aesthetic dermatology and cosmetology, scored lower in the audience evaluation,



suggesting that a change should be considered in their delivery, such as more interactive presentations.

Interestingly, a larger number of speakers per single session was negatively associated with a session's evaluation, suggesting that overcrowded sessions may be too dispersive and likely to be less appreciated by participants.

Other unexplored speakers' variables (eg, age, gender, country of origin, specialty, affiliation) could potentially increase scoring prediction.

It would be advisable for EADV to systematically collect all the available de-identified information in electronic databases in order to improve future

analyses. Topics and sessions should be also categorised in predefined specific areas in order to systematically analyse CME-CPD data.

Over the years, EADV has constantly increased the quality of its congresses. Our findings can be used to predict speakers' rating and sessions' success with the aim to improve the scientific programming and the design of the congress grid. ●

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Figure 1 - Main variables associated with total session's score in multivariate analysis. The graph shows the session's total score change for the most relevant variables selected in multivariate analysis, sorted by kind of topic and type of session. Error bars indicate 95% confidence intervals.

Figure 2 - Main variables associated with total speaker's score in multivariate analysis. The graph shows the speaker's total score change for the most relevant variables selected in multivariate analysis, sorted by kind of topic and type of session. Error bars indicate 95% confidence intervals.

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